

REMARKS

The Final Office Action of June 6, 2005, has been considered by the Applicants. Applicants acknowledge the allowance of claim 25. Claims 1, 10, 20, 22, and 25 have been amended. Claims 1, 2, 4-8, and 10-25 remain pending. Reconsideration of the Application is requested.

Claim 10 was rejected under 35 U.S.C. 112, ¶, as indefinite because it depended from cancelled claim 9. Applicants traverse the rejection.

Claim 10 has been amended to depend from claim 14. Applicants note that in the prior Office Action dated 12/8/2004, the Examiner stated that claims 9 and 14 were of the same scope. Applicants request withdrawal of the rejection.

Claims 1, 2, 4-6, 10-14, and 16-23 were rejected under 35 U.S.C. 103(a) as obvious over Ong. Applicants note that Ong, originally cited as 2003/0144466, has issued as US Patent 6,777,529. Applicants traverse the rejection.

In prior correspondence, Applicants distinguished Ong because Ong required a 3,4-disubstituted thiophene, whereas the instant claims do not. The Examiner replied that because claim 1 used the word "comprise", it did not exclude Ong's disubstituted thiophene. Applicants have amended claim 1 to recite the transitional phrase "consisting of", which explicitly excludes the disubstituted thiophene from the repeating segment. Ong requires the presence of the disubstituted thiophene and does not teach or suggest a polythiophene without it. Therefore, claims 1, 2, 4-6, and 10-14 are not rendered obvious by Ong.

Please note that claims 16-23 constitute a set of claims independent from claims 1-15 and that independent claim 16 has been of narrower scope than claim 1 throughout the entire prosecution. In particular, Formulas (IV-a) and (IV-b) of claim 16 have always explicitly excluded Ong's disubstituted thiophene from the repeating segment. Therefore, claims 16-23 are not rendered obvious by Ong.

On an alternative basis, Applicants note that the Examiner did not reject claims 7, 8, and 24 as obvious based on Ong. These three claims recite the divalent linkage as being a dialkoxyphenylene. Claim 22 has been amended to recite only polymers where the divalent linkage is a dialkoxyphenylene, whereas claims 20 and 21 recite polymers where the divalent linkage is dialkylphenylene or dialkoxyphenylene. Applicants submit that at the very least, claim 22 recites allowable subject matter, and would appreciate an indication from the Examiner as to whether this limitation distinguishes over the prior art references of record.

Applicants request withdrawal of the rejection based on Ong.

Claims 1, 2, 4-8, 10-15, and 24 were rejected under 35 U.S.C. 103(a) as obvious over Arai. Applicants traverse the rejection.

In prior correspondence, Applicants distinguished Arai because Arai required a vinylene group, whereas the instant claims do not. The Examiner replied that because claim 1 used the word "comprise", it did not exclude Arai's vinylene group. Applicants have amended claim 1 to recite the transitional phrase "consisting of", which explicitly excludes the vinylene group from the repeating segment. Arai requires the presence of the vinylene group and does not teach or suggest a thiophene without it. Therefore, claims 1, 2, 4-8, 10-15, and 24 are not rendered obvious by Arai.

Applicants request withdrawal of the rejection based on Arai.

In light of the Examiner's statement that claim 25 may be confusing insofar as the word "optionally" was used, claim 25 has been amended to remove the word "optionally." This ensures that claim 25 is definite.

CONCLUSION

For the above reasons, it is submitted that all pending claims (1, 2, 4-8, and 10-25) are in condition for allowance. Withdrawal of the rejections and issuance of a Notice of Allowance is requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case, she is hereby authorized to call Richard M. Klein, at telephone number 216-861-5582, Cleveland, OH.

It is believed that no fee is due in conjunction with this response. If, however, it is determined that fees are due, authorization is hereby given for deduction of those fees, other than the issue fees, from Deposit Account No. 24-0037.

Respectfully submitted,

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